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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,698	10/27/2003	Farid Bruce Khalili	Vc 013	2291

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STANDLEY LAW GROUP LLP
495 METRO PLACE SOUTH
SUITE 210
DUBLIN, OH 43017

EXAMINER

HOFFMAN, MARY C

ART UNIT	PAPER NUMBER
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3733

MAIL DATE	DELIVERY MODE
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08/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,698

Applicant(s)

KHALILI, FARID BRUCE

Examiner

Mary Hoffman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26, 30, 31 and 34-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30, 31 and 34-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

Claims 30-31 are rejected under 35 U.S.C. 101 because they are drawn to non-statutory subject matter. In claim 30, lines 3-4, applicant positively recites part of a human, i.e. "a first fastener fixed to a first vertebra, a second fastener fixed to a second vertebra". Thus claims 30-31 include a human within their scope and are non-statutory.

A claim directed to or including within its scope a human is not considered to be patentable subject matter under 35 U.S.C. 101. The grant of a limited, but exclusive property right in a human being is prohibited by the Constitution. In *re Wakefield*, 422 F.2d 897, 164 USPQ 636 (CCPA 1970).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-31 and 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman et al. (U.S. Patent No. 5,879,350) in view of Bono et al. (U.S. Patent No. 6,755,829).

Sherman et al. disclose a spinal rod system for bridging one or more adjacent vertebrae, said system comprising: a first fastener (FIGS. 1-2) fixed to a first vertebra; a second fastener fixed to a second vertebra; a rod (ref. #. "R") extending at least between said first and second fasteners; a rod retention assembly associated with each fastener for retaining said rod relative to each respective fastener; each said rod retention assembly comprising a cup (FIG. 5) having an open top end and an open bottom end; said bottom end of said cup having a generally circular hole forming a bottom opening, said bottom opening being sized large enough to allow a portion of said respective fastener to pass through while retaining another portion of said fastener in said cup (col. 6, lines 48-50); said top end of said cup having a top opening and a generally cylindrical wall defining said top opening, said wall having at least two slots diametrically opposed to each other (ref. #33) and extending downwardly from the uppermost portion of said wall; said generally cylindrical wall having an interior cylindrical wall surface with and a sleeve ring (FIG. 7) associated with each cup adapted to be positioned in said cup adjacent to said bottom opening and further adapted to support said associated fastener in said cup, whereby with respect to each cup, said rod is received in each of said slots and said cap is positioned in said cup above said rod. The system further comprising a generally, inwardly tapered conical surface formed on the interior of said cup and surrounding said bottom opening, wherein said sleeve ring is

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positioned against said conical surface between said cup and said fastener in a manner in which said fastener is supported entirely by said sleeve ring. A generally, inwardly tapered conical surface formed on the interior of said cup and surrounding said bottom opening, wherein said lower portion of said screw head rests on said conical surface via the sleeve ring, or collet, in a manner in which said threaded shaft may be adjusted in angular orientation relative to said cup. Each said fastener is a screw having a head of a diameter greater than the inner diameter of said sleeve ring (thus the ring, or collet, is forced to expand), and having a threaded shaft of a diameter less than the inner diameter of said sleeve ring. The lower portion of said screw head is generally hemispherically shaped. The sleeve ring rests on said conical surface and said lower portion of said screw head rests on said sleeve ring in a manner in which said threaded shaft may be adjusted in angular orientation relative to said cup. The ring/collet further comprising a seat spacer (ref. #49) adapted to rest on top of each said fastener head and to be positioned beneath said rod, thereby supporting said rod relative to said fastener. The top surface of each said fastener head is generally dome-shaped and each said seat spacer has a complementary contact surface that contacts said top surface of said respective fastener head in a manner permitting angular adjustment of said respective fastener relative to said seat spacer.

Sherman et al. disclose the claimed invention except for the claimed closure mechanism, i.e. at least two inverted shoulders, each inverted shoulder having a contact surface inclined in a direction radially outwardly from a center axis of said cup; a cap being generally cylindrically shaped and having at least two shoulders extending

radially outward and each having a shoulder with a contact surface inclined in a direction radially outwardly from a center of said cap, the system further comprising a screw inserted through a screw hole in said cap to apply pressure to said rod in order to progressive tighten and lock said rod relative to said cup.

Bono et al. disclose a closure mechanism comprising at least two inverted shoulders, each inverted shoulder having a contact surface inclined in a direction radially outwardly from a center axis of said cup; a cap being generally cylindrically shaped and having at least two shoulders extending radially outward and each having a shoulder with a contact surface inclined in a direction radially outwardly from a center of said cap (FIG. 6A-6C), the system further comprising a screw inserted through a screw hole in said cap to apply pressure to said rod in order to progressive tighten and lock said rod relative to said cup (col. 6, lines 23-27), in order to provide a quick twist-lock closure cap adaptable to diverse reduction screws (col. 2, lines 1-9 and lines 51-54).

It would have been obvious to one of ordinary skill in the art to combine to bone screw assembly of Sherman et al. with the closure mechanism comprising at least two inverted shoulders, each inverted shoulder having a contact surface inclined in a direction radially outwardly from a center axis of said cup; a cap being generally cylindrically shaped and having at least two shoulders extending radially outward and each having a shoulder with a contact surface inclined in a direction radially outwardly from a center of said cap, the system further comprising a screw inserted through a screw hole in said cap to apply pressure to said rod in order to progressive tighten and

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lock said rod relative to said cup in view of Bono et al. to provide a quick twist-lock closure cap adaptable to diverse reduction screws

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Hoffman whose telephone number is 571-272-5566. The examiner can normally be reached on Monday-Friday 9:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo C. Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCH



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